



Testicular Leiomyosarcoma; A rare case report at Timergara teaching hospital Timergara Dir lower KPK, Pakistan

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Introduction

Leiomyosarcoma is a rare tumor of testis and up to date only 30 cases have been reported in globally⁽¹⁾. It is a malignant soft tissue tumors arising from the undifferentiated

smooth muscle cells of mesenchymal origin⁽²⁾. For the first time it was reported by Yachia. D and Auslaender in 1989 and the last case was reported in 2018 by Siraj^(3, 4). Clinical and radiological presentation of

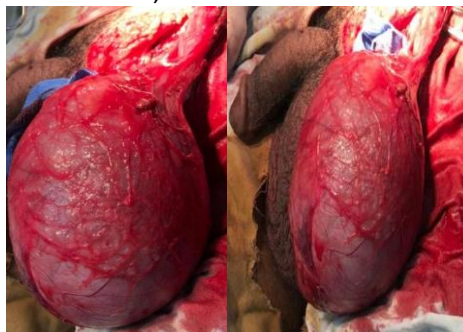


Leiomyosarcoma remains similar to other testicular malignancies^(5,6). Scrotal Ultrasound usually shows a well-delineated hypoechoic mass with or without calcifications⁽⁷⁾. Computed tomography (CT) play important role in the detection of metastases⁽⁸⁾. The diagnosis is confirmed after histological and Immunohistochemical studies⁽⁶⁾.

Case Report

A 64 year old male patient presented to urology OPD with left testicular lump, non-tender on examination. The patient was consulted for the swelling of testes. The physical examination of the patient was done and found a swelling in the left testes, a

painless 3cm node with a palpable epididymo-testicular groove and no inguinal lymph nodes. The testicular Doppler ultrasound revealed, that the left testis was markedly enlarged in size with heterogenous hypoechoic texture show diffusely nodular parenchyma. Few ill-defined hypoechoic nodules were seen with intervening dilated vessels in the left testis which show parenchymal hyperemia on color Doppler. The right testis was of normal size, shape and echogenicity having normal blood flow on color Doppler, no focal lesion was seen. The size of the tumor of left testis was 70 mm with mitotic rate of 7-8 mitosis per 10 high power field.



A radical inguinal orchiectomy under spinal anesthesia was performed by our urology team. In follow up study no complication was found.

Histological study confirmed the diagnosis of FNCLLC grade I left intratesticular Leiomyosarcoma.

Tumor cells shows antibodies: anti-smooth muscle (AML), and caldesmone, while PS100

and CD34 were negative. The thoraco-abdominal-pelvic scan was performed that did not express any suspicious lymph nodes or distant metastasis.

The case was discuss and the decision was taken on the basis of follow up study of one year, in which there were no recurrences or metastasis.



Discussion

This case was diagnosed and operated in teaching hospital Timergara and listed as 31st case in the world. It may arise due to many factor which include exposure to radiotherapy, usage of high dose of steroids or chronic inflammation. This unique disease was a very rare and the last case was seen in 2018(4). It is the 3rd most common malignant tumors of sarcoma. Primary intratesticular leiomyosarcomas usually arise between 4th-7th decades of life. Our patients was at the age of 64 year. In young patients primary intratesticular leiomyosarcomas are commonly associated with testicular with chronic inflammation, germ cell tumors or testicular radiotherapy(4, 9-11). In most of the cases there is no involvement of these predisposing factor, as in our case where no such history was elicited.

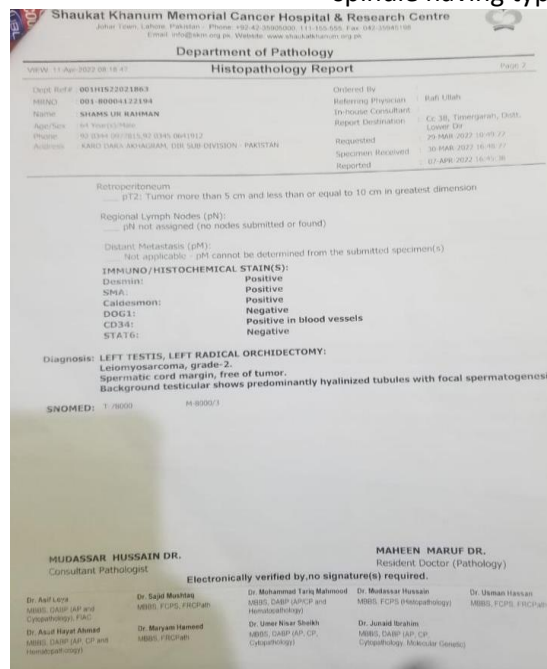
Scrotal Leiomyosarcomas are categorized into paratesticular and intratesticular leiomyosarcomas⁽¹²⁾.

As compared to intratesticular leiomyosarcomas, the Paratesticular are common and about 100 cases have been reported until now⁽¹³⁾. The etiology of testicular leiomyosarcomas is unknown⁽¹⁴⁾. However, it was suggested that hormonal stimulation play an important role in the carcinogenesis of leiomyosarcoma.

Currently Scrotal ultrasound is used as a reference techniques for morphological exploration of bursa⁽¹⁵⁾. Some authors stated that MRI is also very helpful in the diagnosis of testicular carcinoma⁽¹⁶⁾. But the exact and proper diagnosis of testicular Leiomyosarcoma is based on histological studies.

Histologically, in the Leiomyosarcoma state the shape of smooth muscle cells is like spindle having typical nucleus.

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Conclusion

Due to rare condition of the disease, there is limited literature available and so causing factors are also mentioned limited. The clinical and radiological presentation of this disease is similar to other testicular malignancies. It is evident from literature that early diagnosis and treatment help to stop the spreading of disease.

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